

HR-188 Evaluation of Air Pollution Control Devices for Asphalt Pavement Recycling Operations

Key Words: Asphalt pavement, Recycling, Air pollution

ABSTRACT

Iowa Highway Research Board Project HR-188 and all other companion Kossuth County asphalt pavement recycling projects were highly successful. In the author's rather lengthy career, he has never been associated with work that was laid out on paper, as this work was, and then have the work proceed and done precisely as predicted with little or no changes. Not a single problem was encountered on any of this work.

Today, we can safely plan and let asphalt pavement recycling without fear of pollution regulations. Additional strides and improvements are being made in this field everyday. By the 1978 construction season, the author is quite certain that additional equipment manufacturers will have developed procedures by which pollution standards can be met.

One of the next steps in pollution treatment will be the use of the "bag-house" pollution control unit rather than the "wet scrubber" type. Water will not always be available as it was in this work to permit the use of the wet scrubber. From the appearance and results of the stack emissions on this work, it looks as though applying the "bag-house" will be a routine matter.

During construction only two pollution tests were required by the Iowa Department of Environmental Quality. Both far exceeded the established standards for both the 50-50% and 65-35% combined aggregates.

Production time was lost on only two occasions. Once at the very beginning of the work when the plant pollution equipment was fine tuned and once later when the combined aggregates were changed from 50-50 to 65-35 mixture. For these shutdowns or time losses, the contractor was paid \$2,000.00 each. This was money well and economically spent on the project.

Today recycling asphalt pavements is not a speculative proposition. It is a going fact. Though the method of pollution control employed on these projects is probably patented, other manufacturers were close to solving the problem. As additional pollution control devices are developed, the equipment investment should be lower. Thus, bidding competition should be keener and prices lower.

